

Suppl. Table 1: Miscellaneous diagnoses and features (as specified in Fig. 1) identified in 63 patients with at least one serum androgen concentration increased above the Tanner stage-specific reference range, but no conclusive diagnosis explaining androgen excess.

	Pre-pubertal N=41		Post-pubertal N=22	
	Girls	Boys	Girls	Boys
Diagnoses/ features likely to be associated with or due to androgen excess N=13	N=4	N=3	N=6	N=0
	Clitoromegaly, resolving (n=2)	Bilateral adrenal hemorrhages	Clitoromegaly (resolved)	
	Hypertrichosis, resolving	Germ cell tumor	Isolated acne (n=2)	
	Isolated thelarche	Anti-Müllerian-Hormone resistance	Oligomenorrhea (resolved) Excessive sweating Mood swings	
Diagnoses/ features not likely to be associated with or due to androgen excess N=50	N=13	N=21	N=13	N=3
	No diagnosis (n=5)	No diagnosis (n=9)	Simple Obesity (n=9)	Delay of growth and puberty
	Complex cloacal anomaly	Micropenis (n=2)	Road traffic accident	Buried penis, impalpable testes
	Electrolyte abnormalities	Klinefelter syndrome	Bardet Biedl Syndrome	Wiedemann Beckwith Syndrome
	Primary ovarian failure	Septo-optic dysplasia (n=2)	Atopic skin	
	Alström syndrome (n=2)	Pubertal arrest/ primary gonadal failure	Silver Russell Syndrome	
	CHARGE syndrome	CHARGE syndrome		
	Obesity	Hypospadias (n=2)		
	Aldosterone synthase deficiency	Alström syndrome Prader Willi syndrome Supra-sellar cyst		